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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,137	05/30/2000	Teruo Okada	192523US2	1270
22850	7590	02/24/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			WEST, LEWIS G	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			2682	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/579,137

Applicant(s)

OKADA ET AL

Examiner

Lewis G. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-6, 10-19 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 14 and 25-32 is/are allowed.
- 6) ☒ Claim(s) 3-6, 11-13 and 24 is/are rejected.
- 7) ☒ Claim(s) 15-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

Applicant's arguments with respect to claims 3-6, 11-13 and 15-19 have been considered but are moot in view of the new ground(s) of rejection.

The indicated allowability of claim 3 is withdrawn in view of the newly discovered reference(s) to Stein (US 5,905,947). Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 includes the limitation "unit configured to transmit the control signal via radio is configured to transmit the control signal via infrared or electromagnetic waves" Both radio waves and infrared are limitations of a range of frequencies of the range of the electromagnetic spectrum which, in itself makes the claim indefinite (see below), and further a radio wave cannot be an infrared signal as they represent mutually exclusive frequency ranges, and the claim as written would require this.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex*

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*parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 24 recites the broad recitation electromagnetic waves, and the claim also recites both "infrared" and "radio" which are narrower statements of the range/limitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5-6 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (6,606,506) in view of SONY CPD-X77ES (hereafter SONY) further in view of Stein (US 5,905,947).

Jones discloses an audio system comprising a head attachment unit having a reproduction portion configured to reproduce audio information stored in a memory portion and an output portion configured to output sound according to the reproduced audio information (Col. 3 lines 8-22); and a remote control unit (72) having a plurality of operating buttons corresponding to one

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of a plurality of operation mode for audio reproduction (col. 6 lines 14-23), wherein the remote control (72) unit comprises a transmitter (78) configured to transmit the control signal (Col. 6 lines 14-23)

Jones does not specifically describe the button functions of the remote. The Sony manual for the CPD-77ES describes audio mode buttons on a wireless remote including play (start producing audio), stop, rewind and fast-forward for CD controls. (pages 16-17) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include these in order to access different portions of audio segments and to interrupt the audio when necessary as it is further suggested by Jones, col. 6 lines 14-23, that CD controls may be used in the remote.

Jones and the Sony reference disclose wirelessly transmitting the control signals, and that any wireless control configuration may be used, but do not expressly disclose radio waves via an antenna inserted through a shield.

Stein discloses a headphone remote having a radio antenna insertable through a shield (no specific shielding type is claimed, so any housing reads on a shield). (see col. 7 lines 35-60; Figures 3, 12)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have a radio antenna inserted through a shield, the non directional nature of a radio connection being useful for a connection to a headset as the line of sight required by an optical connection would be more difficult to maintain, and to insert the antenna through the a shield opening to allow a larger external antenna which may be rotated for maximum efficiency to be used modularly with the internal circuitry of the device.

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Regarding claim 6, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein the remote control unit is in the shape of a ring. When a watch (see item 72 of Jones) is in use it takes a circular shape, which is the shape of a ring.

Regarding claim 11, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein the memory portion is freely attachable and detachable to and from the head attachment audio unit body. (Jones, Col. 3 lines 24-38)

Regarding claim 12, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein the memory portion is a solid memory disposed to the head attachment audio unit body. (Jones, Col. 3 lines 24-38)

Regarding claim 13, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein the head attachment audio unit further comprises an audio input signal. (Jones, Figure 1, microphone 24)

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (6,606,506) in view of SONY CPD-X77ES (hereafter SONY) further in view of Stein (US 5,905,947) and further in view of Hall (US 6,307,945).

Regarding claim 4, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein there is attachment of the remote with a watch band, but does not expressly disclose a chain. Hall discloses a remote for an audio earset attached as a chain pendant (Col. 4 line 43-58; Col. 5 lines 8-23) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a chain as shown in Hall provides a convenient way to carry a remote device which leaves it easily accessible to both hands, and provides the additional advantage that voice control could be easily implemented in such a configuration.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (6,606,506) in view of SONY CPD-X77ES (hereafter SONY) further in view of Stein (US 5,905,947) and further in view of Vogel (GB 2 316 788 A).

Regarding claim 5, the combination of Jones, SONY and Stein discloses the audio system of claim 3 wherein the remote control unit is attached to a watchband. But does not expressly disclose that it is attachable and detachable to and from the watchband. Vogel discloses a headset remote which comprises a mechanism of attaching and detaching the remote control unit to and from a watchband. (Page 5 line 28- Page 6 line 7, Figs. 2, 3A, 3B) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have the remote detachable from the watchband, as it would allow (as in Vogel Figures 2 and 3A) the remote to be attached using the same means as a wristwatch, providing a convenience of integrating multiple devices into one means for attachment. (see Vogel Page 5 lines 23-27)

***Allowable Subject Matter***

Claims 10, 14 and 25-32 are allowable.

Reasons for allowability of claims 10 and 14 may be found in the previous office action mailed September 9, 2005. Claims 25-32 depend directly or indirectly from claim 14. When

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incorporating all the limitations of the base claim and any intervening claims, none of the prior art discloses the features as claimed.

Claims 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 15, the prior art discloses the audio system of claim 3, see the above rejection. However the prior art does not teach or fairly suggest the two way connection between the headset and remote including a response portion in the headset for sending a return response signal from the headset and the remote having a receiver for said return response signal as specifically laid out in claim 15, when viewed in combination with the entirety of the claimed subject matter. When incorporating all the limitations of the base claim and any intervening claims, none of the prior art discloses the features as claimed.

Claims 16-19 depend directly or indirectly from claim 15, when incorporating all the limitations of the base claim and any intervening claims, none of the prior art discloses the features as claimed.

Claim 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.



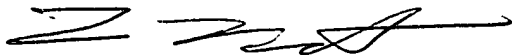
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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lewis West  
(571) 272-7859